



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY, FLORIDA
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Eco Window Systems, LLC
9114 NW 106 Street
Medley, FL 33178

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "400" Aluminum Window Wall System w/Window Inserts – S.M.I.

APPROVAL DOCUMENT: Drawing No. W12-09, titled "Series 400 Alum. Window Wall System (S.M.I.)", sheets 1 through 9 of 9, dated 03/02/12, with revision C dated 12/01/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 12-0801.03 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.



MP
12/04/15

NOA No. 15-0603.14
Expiration Date: December 20, 2017
Approval Date: December 10, 2015
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under previous NOA No. 12-0801.03)
2. Drawing No. **W12-09**, titled "Series 400 Alum. Window Wall System (S.M.I.)", sheets 1 through 9 of 9, dated 03/02/12, with revision C dated 12/01/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-10-3064R**, dated 01/18/11, signed and sealed by Candido F. Font, P.E.
(Submitted under previous NOA No. 12-0801.03)
2. Test reports on: 1) Small Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Reports No.'s **HETI-10-3065**, **HETI-10-3067**, **HETI-10-3069**, and **HETI-10-3070**, all dated 10/18/10, all signed and sealed by Candido F. Font, P.E.
(Submitted under previous NOA No. 12-0801.03)
3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-10-3064**, **HETI-10-3066** and **HETI-10-3068**, all dated 10/18/10, all signed and sealed by Candido F. Font, P.E.
(Submitted under previous NOA No. 12-0801.03)
4. Test reports on: 1) Safety Performance (Drop Load) Test, (class A, Sec. 5)
per ANSI Z97.1-1984 and CPSC 16 CFR, CH II, Part 1201
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-10-3096**, dated 10/18/10, signed and sealed by Candido F. Font, P.E.
(Submitted under previous NOA No. 12-0801.03)


Manuel Perez, P. E.
Product Control Examiner

NOA No. 15-0603.14

Expiration Date: December 20, 2017

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C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, submitted dated 06/02/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Glazing complies with **ASTM E 1300-09**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS


1. Notice of Acceptance No. **14-0916.10** issued to **Kuraray America, Inc.** for their "**Butacite® PVB Glass Interlayer**" dated 04/25/15, expiring on 12/11/16.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC-5th Edition (2014)**, and of no financial interest, dated June 1, 2015, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Laboratory compliance letters for Test Reports No.: **HETI-10-3065, HETI-10-3067, HETI-10-3069, HETI-10-3070, HETI-10-3064, HETI-10-3066, HETI-10-3068 and HETI-10-3064R**, all issued by Hurricane Engineering & Testing, Inc., all dated 10/18/10 and 01/18/11, all signed and sealed by Candido F. Font, P.E.
(Submitted under previous NOA No. 12-0801.03)
3. Proposal No. **10-0233R** issued by Product Control Section, dated 07/12/10, signed by Manuel Perez, P.E.
(Submitted under previous NOA No. 12-0801.03)

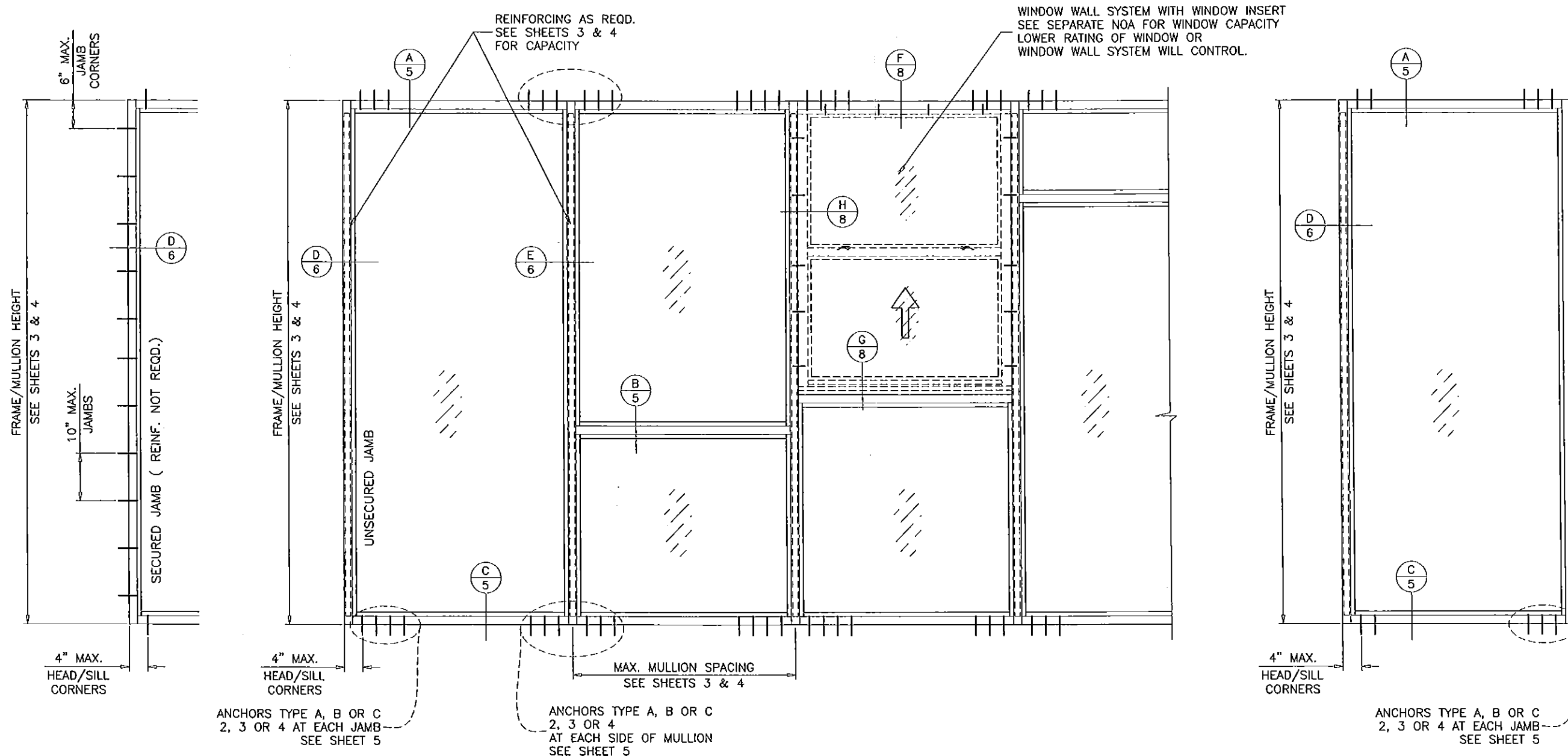
G. OTHERS

1. Notice of Acceptance No. **12-0801.03**, issued to Eco Window Systems, LLC for their Series "**400**" Aluminum Window Wall System With Window Inserts – **S.M.I.**, approved on 12/20/12 and expiring on 12/20/17.



Manuel Perez, P. E.
Product Control Examiner
NOA No. 15-0603.14

Expiration Date: December 20, 2017
Approval Date: December 10, 2015



SERIES 400 ALUMINUM WINDOW WALL SYSTEM

THIS SYSTEM IS RATED FOR SMALL MISSILE IMPACT.

MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS ARE REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE.

SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2014 (5TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** CHECK GLASS CAPACITY TABLE ON SHEET 2 FOR GLASS TYPE, GLASS DIMENSIONS (WIDTH & HEIGHT) AND PRESSURE CAPACITY.
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 3** CHECK WINDOW WALL SYSTEM CAPACITY FOR DESIRED HEIGHT AND MULLION SPACING USING CHARTS ON SHEETS 3 & 4.
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHARTS ON SHEET 5 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** VERIFY UNANCHORED JAMBS, IF USED AS PER SHEETS 3, 4 AND 7.
- STEP 6** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0603.14
Expiration Date 12/20/2017

By *Manuel Perez*
Miami Dade Product Control

SMALL MISSILE IMPACT

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

DEC 01 2015

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 STORE W12-09ECO

SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)
ECO WINDOW SYSTEMS, LLC.
 9114 N.W. 106 STREET
 MEDLEY, FL. 33178
 TEL. (305) 885-5299 FAX (305) 885-5902

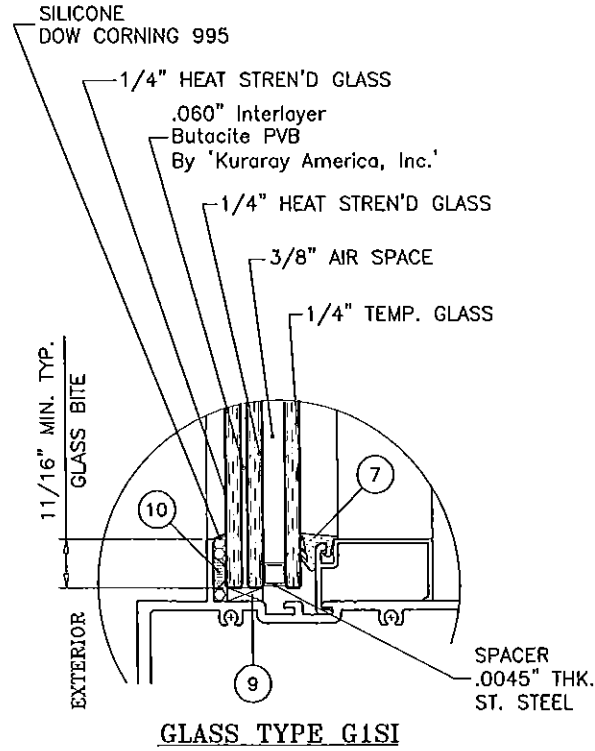
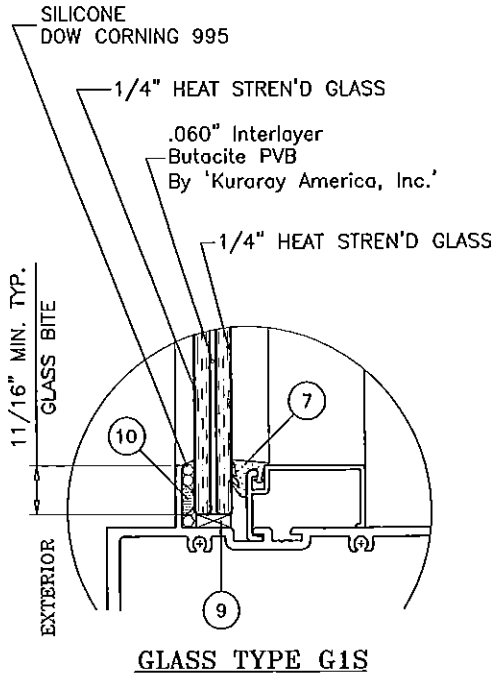
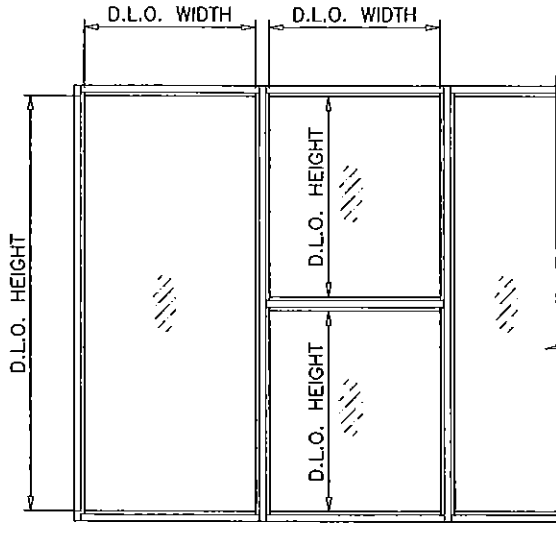
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B	04.20.15	REV. PER RER COMMENTS	REV. PER RER COMMENTS
C	12.01.15	REV. PER RER COMMENTS	REV. PER RER COMMENTS

date: 03-02-12
 scale: 1/2"=1'-0"
 dr. by: HAMID
 chk. by:

drawing no.
W12-09
 sheet 1 of 9

GLASS LOAD CAPACITY - PSF			
NOMINAL DIMS.		GLASS TYPES 'G1S' & 'G1SI'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
26-1/2"	78-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
44-1/2"		90.0	130.0
50-1/2"		90.0	130.0
56-1/2"		90.0	130.0
26-1/2"	84-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
44-1/2"		90.0	130.0
50-1/2"		90.0	130.0
56-1/2"		90.0	130.0
26-1/2"	90-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
44-1/2"		90.0	130.0
50"		90.0	130.0
50-1/2"		90.0	130.0
56-1/2"		90.0	130.0
26-1/2"	96-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
44-1/2"		90.0	130.0
47"		90.0	130.0
50-1/2"		90.0	130.0
26-1/2"	102-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
44"		90.0	130.0
44-1/2"		90.0	130.0
49"		90.0	130.0
26-1/2"	108-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
41"		90.0	130.0
44-1/2"		90.0	130.0
47"		90.0	130.0
26-1/2"	114-3/4"	90.0	130.0
32-1/2"		90.0	130.0
38-1/2"		90.0	130.0
39"		90.0	130.0
44-1/2"		90.0	130.0
		90.0	130.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



GLAZING OPTIONS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0603.14
Expiration Date 12/20/2017
By *Manuel Diaz*
Miami Trade Product Control

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
[Signature]
DEC 01 2015

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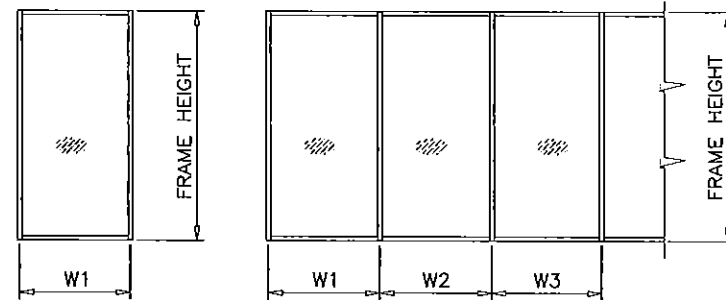
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scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

no	date	description
A	12.11.12	REV. PER RER COMMENTS
B	04.20.15	UPDATED TO 2014 FBC
C	12.01.15	REV. PER RER COMMENTS

drawing no.
W12-09

sheet 2 of 9

JAMB & MULLION LOAD CAPACITY - PSF							
JAMBS & MULLIONS WITHOUT INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		JAMB 'J1' MULL 'M1'		JAMB 'J2' MULL 'M2'		JAMB 'J2' MULL 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	84"	90.0	130.0	90.0	130.0	90.0	130.0
36"		90.0	130.0	90.0	130.0	90.0	130.0
42"		90.0	130.0	90.0	130.0	90.0	130.0
48"		90.0	130.0	90.0	130.0	90.0	130.0
54"		90.0	120.6	90.0	130.0	90.0	130.0
60"		90.0	112.8	90.0	130.0	90.0	130.0
30"	90"	90.0	130.0	90.0	130.0	90.0	130.0
36"		90.0	130.0	90.0	130.0	90.0	130.0
42"		90.0	124.4	90.0	130.0	90.0	130.0
48"		90.0	111.5	90.0	130.0	90.0	130.0
54"		90.0	101.9	90.0	130.0	90.0	130.0
60"		90.0	94.8	90.0	130.0	90.0	130.0
30"	96"	90.0	130.0	90.0	130.0	90.0	130.0
36"		90.0	123.1	90.0	130.0	90.0	130.0
42"		90.0	107.3	90.0	130.0	90.0	130.0
48"		90.0	95.9	90.0	130.0	90.0	130.0
54"		87.3	87.3	90.0	129.7	90.0	130.0
60"		80.9	80.9	90.0	120.1	90.0	130.0
30"	102"	90.0	122.2	90.0	130.0	90.0	130.0
36"		90.0	103.4	90.0	130.0	90.0	130.0
42"		90.0	90.3	90.0	130.0	90.0	130.0
48"		80.8	80.8	90.0	123.4	90.0	130.0
54"		73.6	73.6	90.0	112.0	90.0	130.0
56"		71.7	71.7	90.0	108.9	90.0	130.0
30"	108"	90.0	102.5	90.0	130.0	90.0	130.0
36"		86.6	86.6	90.0	130.0	90.0	130.0
42"		75.5	75.5	90.0	121.3	90.0	130.0
48"		67.4	67.4	90.0	107.8	90.0	130.0
53"		62.1	62.1	90.0	99.2	90.0	122.4
30"	114"	86.9	86.9	90.0	130.0	90.0	130.0
36"		73.3	73.3	90.0	123.0	90.0	130.0
42"		63.8	63.8	90.0	107.0	90.0	130.0
48"		56.8	56.8	90.0	95.0	90.0	117.2
50"		54.9	54.9	90.0	91.6	90.0	113.1
30"	120"	74.3	74.3	90.0	124.7	90.0	130.0
36"		62.6	62.6	90.0	105.0	90.0	129.7
42"		54.4	54.4	90.0	91.2	90.0	112.6
48"		48.3	48.3	81.1	81.1	90.0	100.1



$$\text{WIDTH (W)} = W1$$

AT FRAME JAMB

$$\text{WIDTH (W)} = \frac{W2 + W3}{2}$$

AT FRAME MULLION

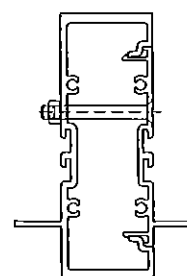
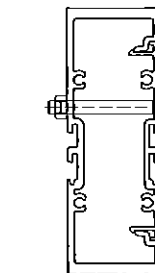
UNSECURED JAMB 'J1'

Ix IN ⁴	Sx IN ³
4.731	2.5580

UNSECURED JAMB 'J2'

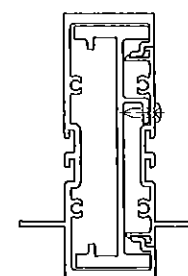
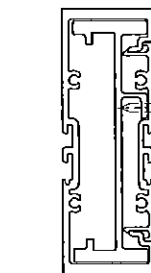
Ix IN ⁴	Sx IN ³
10.5919	4.1062

REINFORCING REQD. AT
UNSECURED JAMBS ONLY
SEE CHART FOR CAPACITY



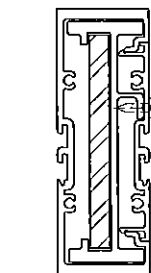
MULLION 'M1'

Ix IN ⁴	Sx IN ³
6.7306	2.6093



MULLION 'M2'

Ix IN ⁴	Sx IN ³
10.8376	4.2014



MULLION 'M3'

	Ix IN ⁴	Sx IN ³
ALUMINUM	10.8376	4.2014
STEEL	2.000	1.0000
TOTAL	12.8376	5.2014
Ix ALUM + Ix STL X 2.9	16.6376	

PRODUCT REVISED
as complying with the Florida
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By *Manuel Perez*
Miami Made Product Control

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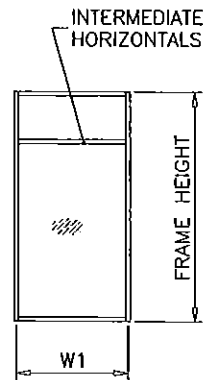
Revisions:

no	date	by	description
A	12.11.12	REV. PER RER COMMENTS	
B	04.20.15	UPDATED TO 2014 FBC	
C	12.01.15	NO CHANGE THIS SHEET	

date: 03-02-12
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dr. by: HAMID
chk. by:

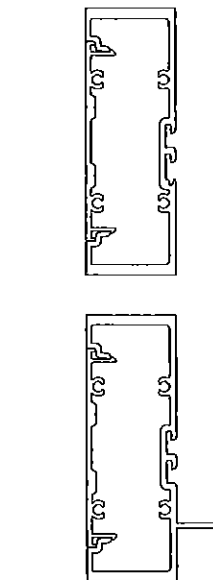
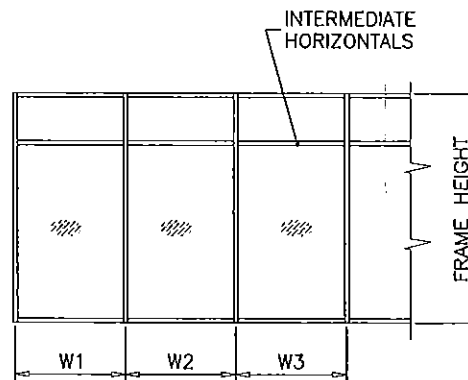
drawing no.
W12-09
sheet 3 of 9

JAMB & MULLION LOAD CAPACITY - PSF							
JAMBS & MULLIONS WITH INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		JAMB 'J1' MULL 'M1'		JAMB 'J2' MULL 'M2'		JAMB 'J2' MULL 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	84"	90.0	130.0	90.0	130.0	90.0	130.0
36"		90.0	130.0	90.0	130.0	90.0	130.0
42"		90.0	130.0	90.0	130.0	90.0	130.0
48"		90.0	117.2	90.0	130.0	90.0	130.0
54"		90.0	104.2	90.0	130.0	90.0	130.0
60"		90.0	93.8	90.0	130.0	90.0	130.0
30"	90"	90.0	130.0	90.0	130.0	90.0	130.0
36"		90.0	130.0	90.0	130.0	90.0	130.0
42"		90.0	115.6	90.0	130.0	90.0	130.0
48"		90.0	101.1	90.0	130.0	90.0	130.0
54"		89.9	89.9	90.0	130.0	90.0	130.0
60"		80.9	80.9	90.0	120.6	90.0	130.0
30"	96"	90.0	130.0	90.0	130.0	90.0	130.0
36"		90.0	117.5	90.0	130.0	90.0	130.0
42"		90.0	100.7	90.0	130.0	90.0	130.0
48"		90.0	88.1	90.0	130.0	90.0	130.0
54"		78.3	78.3	90.0	116.3	90.0	130.0
60"		70.5	70.5	90.0	104.7	90.0	129.2
30"	102"	90.0	118.3	90.0	130.0	90.0	130.0
36"		90.0	98.6	90.0	130.0	90.0	130.0
42"		84.5	84.5	90.0	130.0	90.0	130.0
48"		73.9	73.9	90.0	115.9	90.0	130.0
54"		65.7	65.7	90.0	103.0	90.0	127.2
56"		63.4	63.4	90.0	99.4	90.0	122.6
30"	108"	90.0	99.6	90.0	130.0	90.0	130.0
36"		83.0	83.0	90.0	130.0	90.0	130.0
42"		71.2	71.2	90.0	118.2	90.0	130.0
48"		62.3	62.3	90.0	103.4	90.0	127.6
53"		56.4	56.4	90.0	93.6	90.0	115.6
30"	114"	84.7	84.7	90.0	130.0	90.0	130.0
36"		70.6	70.6	90.0	118.4	90.0	130.0
42"		60.5	60.5	90.0	101.5	90.0	125.3
48"		52.9	52.9	88.8	88.8	90.0	109.6
50"		50.8	50.8	85.3	85.3	90.0	105.3
30"	120"	72.6	72.6	90.0	121.8	90.0	130.0
36"		60.5	60.5	90.0	101.5	90.0	125.3
42"		51.9	51.9	87.0	87.0	90.0	107.4
48"		45.4	45.4	76.2	76.2	90.0	94.0



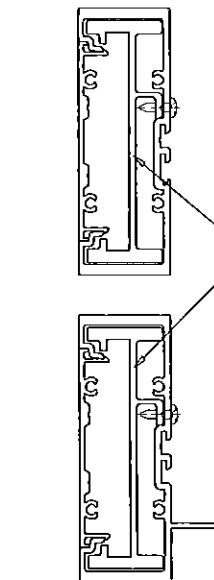
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AT FRAME JAMB

WIDTH (W) = $\frac{W2 + W3}{2}$
AT FRAME MULLION



UNSECURED JAMB 'J1'

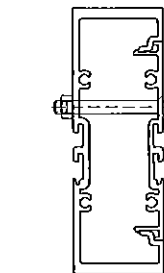
Ix IN ⁴	Sx IN ³
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UNSECURED JAMB 'J2'

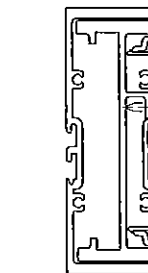
Ix IN ⁴	Sx IN ³
10.5919	4.1062

REINFORCING REQD. AT
UNSECURED JAMBS ONLY
SEE CHART FOR CAPACITY



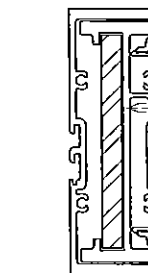
MULLION 'M1'

Ix IN ⁴	Sx IN ³
6.7306	2.6093



MULLION 'M2'

Ix IN ⁴	Sx IN ³
10.8376	4.2014



MULLION 'M3'

	Ix IN ⁴	Sx IN ³
ALUMINUM	10.8376	4.2014
STEEL	2.000	1.0000
TOTAL Ix ALUM + Ix STL X 2.9	16.6376	

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0603.14
Expiration Date 12/20/2017
By *Mamuk Fuz*
Miami Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

DEC 01 2015

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL (305) 264-8100 FAX (305) 262-6978
STORE W12-09ECO

SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)
ECO WINDOW SYSTEMS, LLC.
9114 N.W. 106 STREET
MEDLEY, FL. 33178
TEL. (305) 885-5299 FAX (305) 885-5902

revisions:

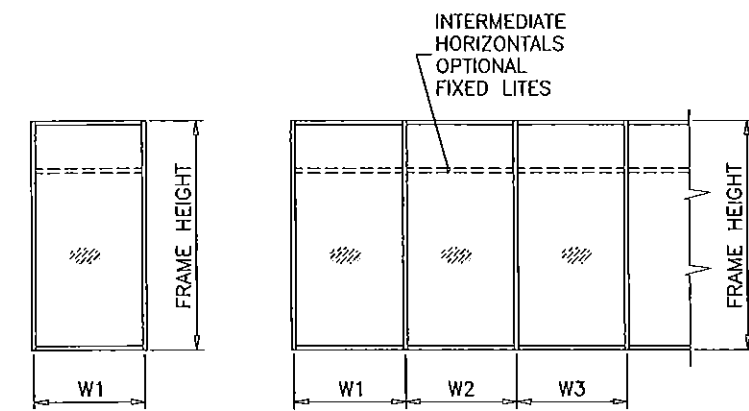
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B	04.20.15		UPDATED TO 2014 FBC
C	12.01.15		NO CHANGE THIS SHEET

date: 03-02-12
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W12-09
sheet 4 of 9

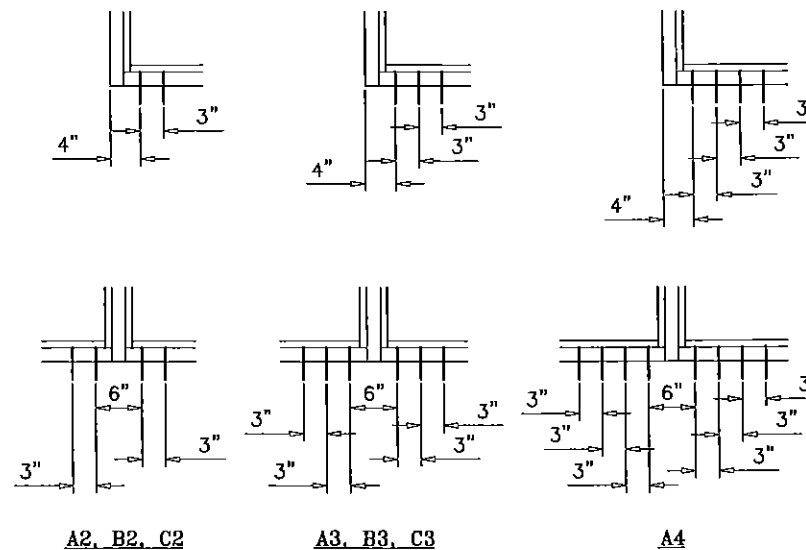
ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)							
NOMINAL DIMS.		ANCHORS TYPE 'A'			ANCHORS TYPE 'B' & 'C'		
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2/C2	B3/C3	B4/C4
30"	72"	130.0	130.0	130.0	130.0	130.0	130.0
36"		119.6	130.0	130.0	130.0	130.0	130.0
42"		102.5	130.0	130.0	130.0	130.0	130.0
48"		89.7	130.0	130.0	114.7	130.0	130.0
53"		81.2	121.8	130.0	103.8	130.0	130.0
54"		79.7	119.6	130.0	101.9	130.0	130.0
56"		76.9	115.3	130.0	98.3	130.0	130.0
60"		71.7	107.6	130.0	91.7	130.0	130.0
30"	78"	130.0	130.0	130.0	130.0	130.0	130.0
36"		110.4	130.0	130.0	130.0	130.0	130.0
42"		94.6	130.0	130.0	121.0	130.0	130.0
48"		82.8	124.2	130.0	105.8	130.0	130.0
53"		75.0	112.4	130.0	95.9	130.0	130.0
54"		73.6	110.4	130.0	94.1	130.0	130.0
56"		70.9	106.4	130.0	90.7	130.0	130.0
60"		66.2	99.3	130.0	84.7	127.0	130.0
30"	84"	123.0	130.0	130.0	130.0	130.0	130.0
36"		102.5	130.0	130.0	130.0	130.0	130.0
42"		87.8	130.0	130.0	112.3	130.0	130.0
48"		76.9	115.3	130.0	98.3	130.0	130.0
53"		69.6	104.4	130.0	89.0	130.0	130.0
54"		68.3	102.5	130.0	87.4	130.0	130.0
56"		65.9	98.8	130.0	84.2	126.4	130.0
60"		61.5	92.2	123.0	78.6	117.9	130.0
30"	90"	114.8	130.0	130.0	130.0	130.0	130.0
36"		95.6	130.0	130.0	122.3	130.0	130.0
42"		82.0	123.0	130.0	104.8	130.0	130.0
48"		71.7	107.6	130.0	91.7	130.0	130.0
53"		65.0	97.4	129.9	83.1	124.6	130.0
54"		63.8	95.6	127.5	81.5	122.3	130.0
56"		61.5	92.2	123.0	78.6	117.9	130.0
60"		57.4	86.1	114.8	73.4	110.1	130.0
30"	96"	107.6	130.0	130.0	130.0	130.0	130.0
36"		89.7	130.0	130.0	114.7	130.0	130.0
42"		76.9	115.3	130.0	98.3	130.0	130.0
48"		67.3	100.9	130.0	86.0	129.0	130.0
53"		60.9	91.4	121.8	77.9	116.8	130.0
54"		59.8	89.7	119.6	76.4	114.7	130.0
56"		57.6	86.5	115.3	73.7	110.6	130.0
60"		53.8	80.7	107.6	68.8	103.2	130.0
30"	102"	101.3	130.0	130.0	129.5	130.0	130.0
36"		84.4	126.6	130.0	107.9	130.0	130.0
42"		72.3	108.5	130.0	92.5	130.0	130.0
48"		63.3	94.9	126.6	80.9	121.4	130.0
53"		57.3	86.0	114.6	73.3	110.0	130.0
54"		56.3	84.4	112.5	71.9	107.9	130.0
56"		54.3	81.4	108.5	69.4	104.1	130.0
30"	108"	95.6	130.0	130.0	122.3	130.0	130.0
36"		79.7	119.6	130.0	101.9	130.0	130.0
42"		68.3	102.5	130.0	87.4	130.0	130.0
48"		59.8	89.7	119.6	76.4	114.7	130.0
53"		54.1	81.2	108.3	69.2	103.8	130.0

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)							
NOMINAL DIMS.		ANCHORS TYPE 'A'			ANCHORS TYPE 'B' & 'C'		
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2/C2	B3/C3	B4/C4
30"	114"	90.6	130.0	130.0	115.9	130.0	130.0
36"		75.5	113.3	130.0	96.6	130.0	130.0
42"		64.7	97.1	129.4	82.8	124.2	130.0
48"		56.6	84.9	113.3	72.4	108.6	130.0
30"	120"	86.1	129.1	130.0	110.1	130.0	130.0
36"		71.7	107.6	130.0	91.7	130.0	130.0
42"		61.5	92.2	123.0	78.6	117.9	130.0
48"		53.8	80.7	107.6	68.8	103.2	130.0



WIDTH (W) = W1
AT FRAME JAMB

WIDTH (W) = $\frac{W2 + W3}{2}$
AT FRAME MULLION



ANCHORS TYPES: SEE SHEET 6 FOR DESCRIPTION

- A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
- A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
- A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 15-0603.14
 Expiration Date 12/20/2017
 By *Manuel Perez*
 Miami Data Product Control

NOTE:
 USE SEAR CLIP UW-403 AT
 ANCHOR LOCATIONS OF SUFFICIENT LENGTH
 TO COVER ALL ANCHOR SPACINGS

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538

DEC 01 2015

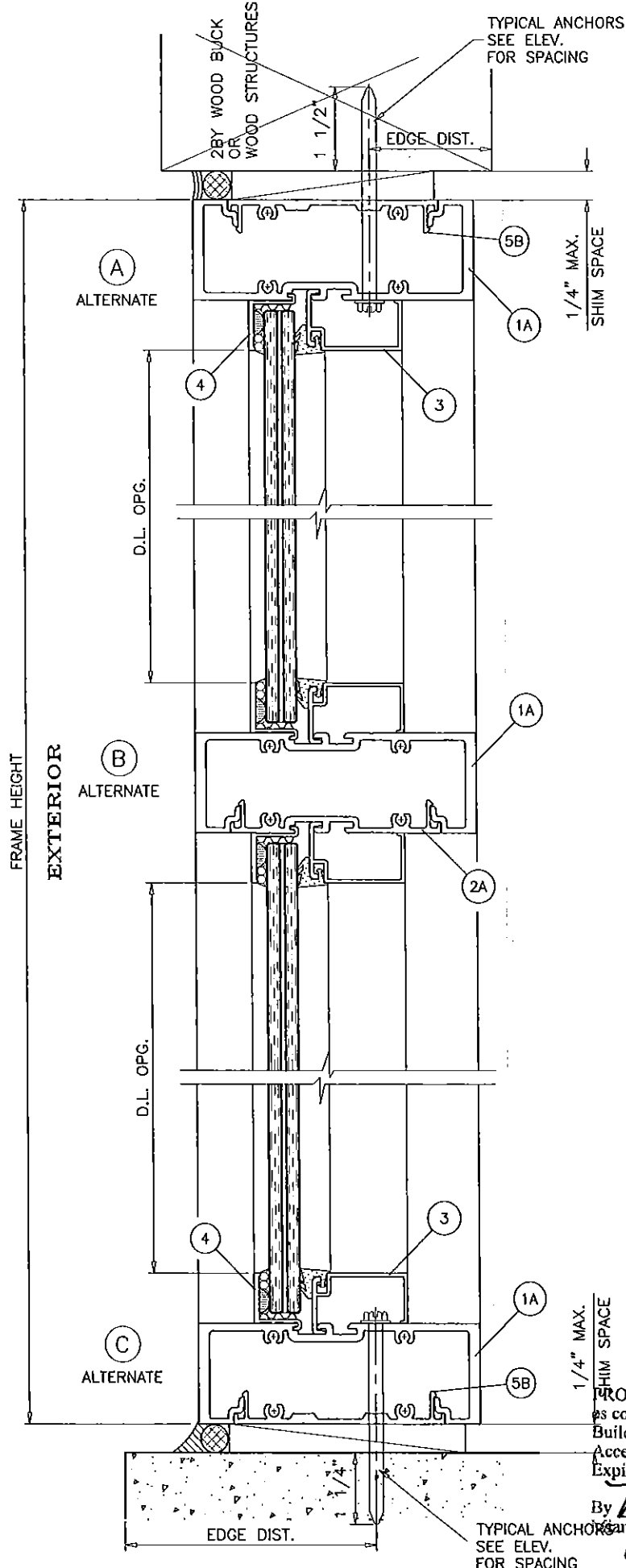
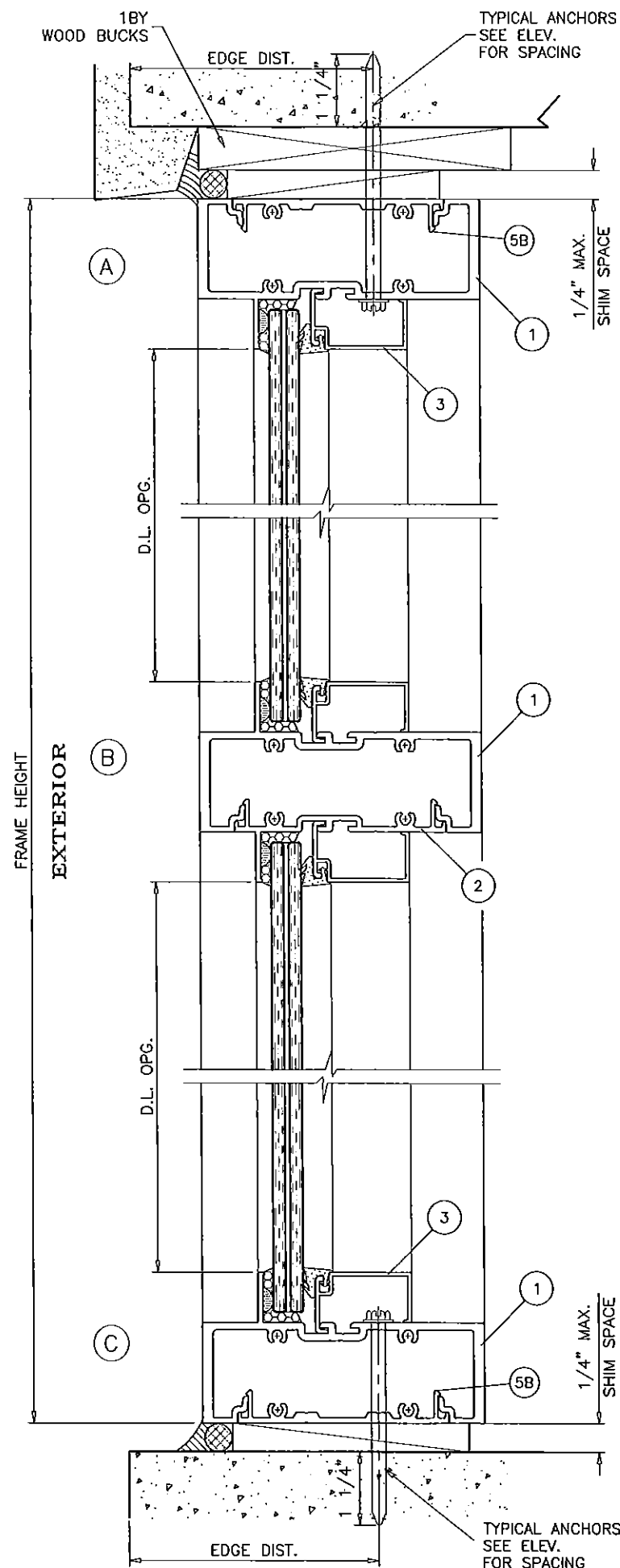
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL (305) 264-8100 FAX (305) 262-6978
 STORE W12-09ECO

SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)
ECO WINDOW SYSTEMS, LLC.
 9114 N.W. 106 STREET
 MEDLEY, FL. 33178
 TEL. (305) 885-5299 FAX (305) 885-5902

no	date	by	description
A	12.11.12		NO CHANGE THIS SHEET
B	04.20.15		UPDATED TO 2014 FBC
C	12.01.15		NO CHANGE THIS SHEET

date: 03-02-12
 scale: 1/2"=1'-0"
 dr. by: HAMID
 chk. by:

drawing no.
W12-09
 sheet 5 of 9



WOOD BUCKS AND METAL STRUCTURE NOT BY ECO WINDOWS MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'

1/4" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
WITH 1-1/2" MIN. PENETRATION INTO WOOD
THRU 1BY WOOD BUCKS INTO CONCRETE
WITH 1-1/4" MIN. EMBED INTO CONCRETE

DIRECTLY INTO CONCRETE OR MASONRY
WITH 1-1/4" MIN. EMBED INTO CONC. OR MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.

TYPE 'B'

5/16" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO WOOD STRUCTURES
WITH 1-7/8" MIN. PENETRATION INTO WOOD
THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE
WITH 1-1/4" MIN. EMBED INTO CONCRETE

DIRECTLY INTO CONCRETE OR MASONRY
WITH 1-1/4" MIN. EMBED INTO CONC. OR MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 3" MIN.
INTO WOOD STRUCTURE = 1-1/4" MIN.

TYPE 'C'

#14 SMS OR SELF DRILLING SCREWS ST/ST (GRADE 2 CRS)

INTO METAL STRUCTURES

STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)

ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES

INTO METAL STRUCTURE = 1/2" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.

NORMAL WEIGHT CMU PER ASTM C-90 AT JAMBS f'm = 2000 PSI MIN.

SEALANTS:

ALL FRAME JOINTS AND SEAMS SEALED WITH
SCHNEE-MOREHEAD SM5504 ACRYL-R SEAM SEALER.

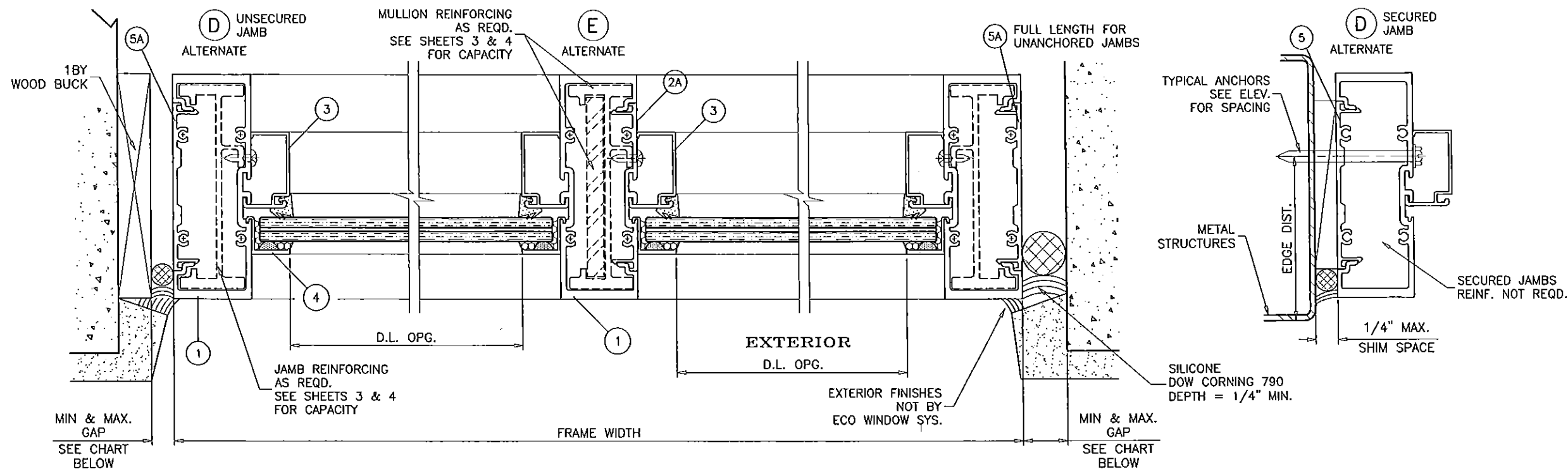
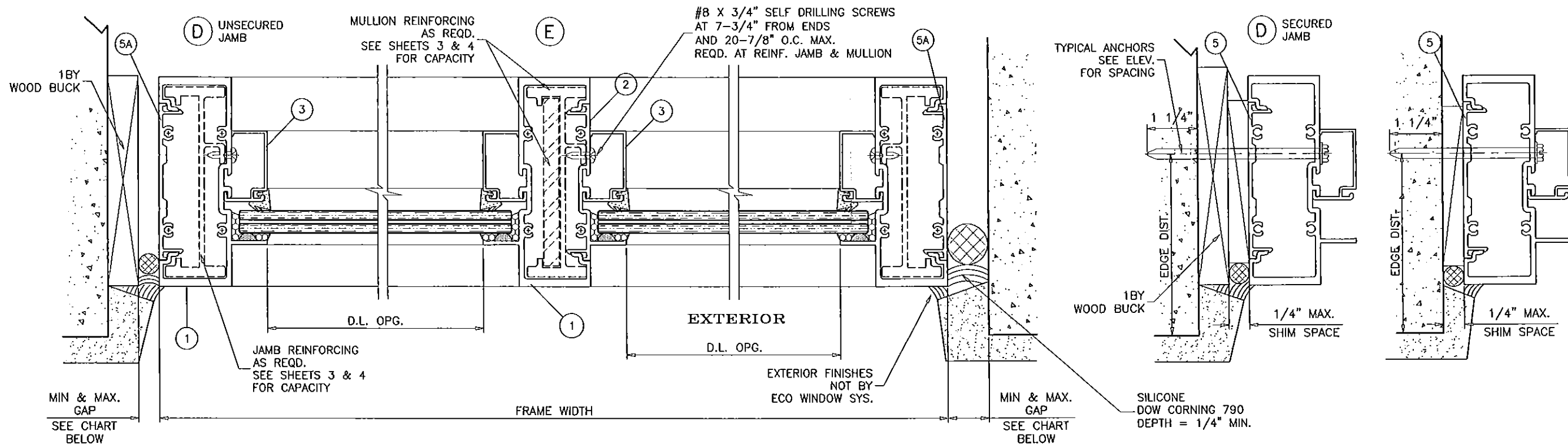
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0603.14
Expiration Date 12/2017
By *Wahid*
and Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
[Signature]
01205

afC
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE W12-09ECO

SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)
ECO WINDOW SYSTEMS, LLC.
9114 N.W. 106 STREET
MEDLEY, FL. 33178
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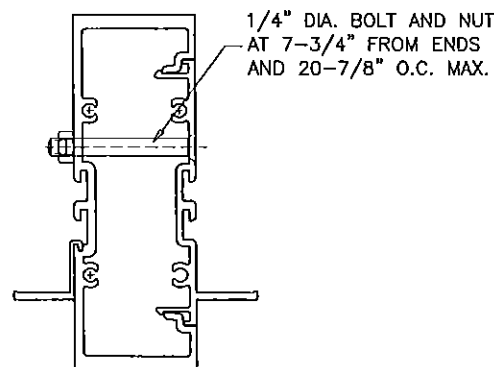
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	04.20.15	UPDATED TO 2014 FBC			
	12.01.15	REV. PER RER COMMENTS			
date:	03-02-12	scale:	3/8" = 1"	dr. by:	HAMID
				chk. by:	
drawing no.	W12-09				
sheet	6 of 9				



MAX. FRAME HEIGHT UPTO	GAPS FOR UNANCHORED JAMBS	
	MIN.	MAX.
120"	1/4"	1"

NOTE:
MAX. MOVEMENT CONSIDERED=100% STRETCH.
PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOW WALL MATERIAL/FINISH AND COMPLIANCE FOR WARRANTY.
REFER TO ACI-117-10 FOR CONSTRUCTION TOLERANCES.

ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.
GAPS LESS THAN 1/4" MAY BE DESIGNED BY ENGINEER OF RECORD BY THE USE OF BOND BREAKER TAPE OR 15% OF GAP ALLOWED MOVEMENT.
REFER TO SHEETS 4 THRU 7 FOR SELECTION OF MULLION/JAMB WITH REINFORCED & UNREINFORCED FRAMES.



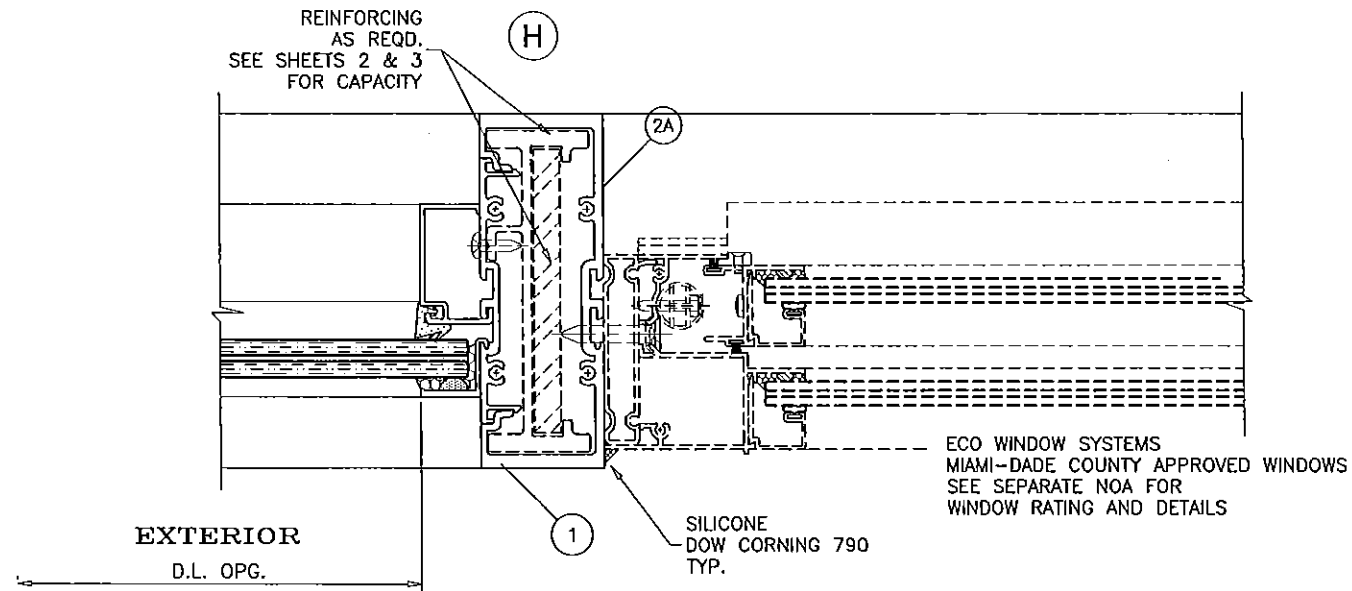
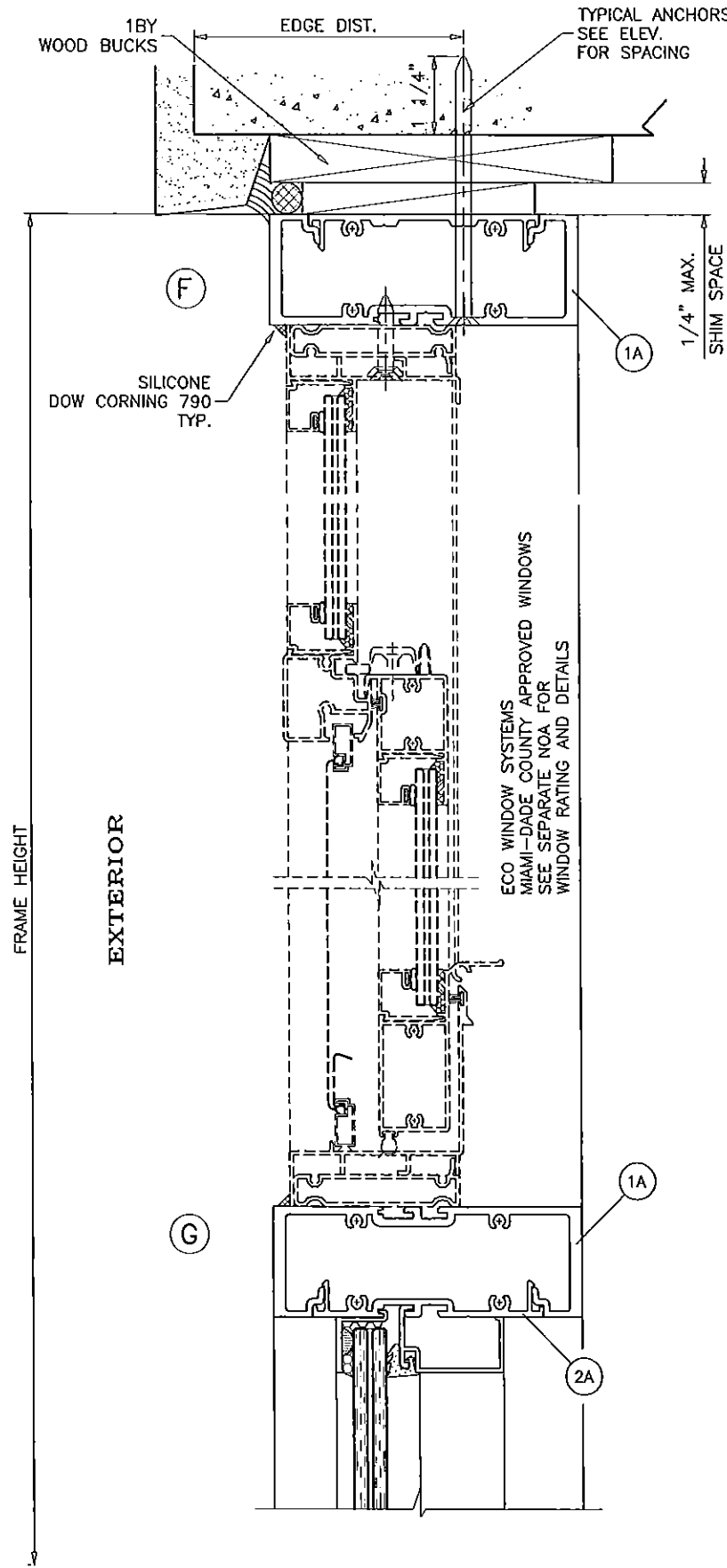
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Building Code
Acceptance No. 15-0603.14
Expiration Date 12/20/2017
By *Manuel Elvez*
Miami Made Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
[Signature]
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afC
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX (305) 262-6978
STORE W12-09ECO

SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)
ECO WINDOW SYSTEMS, LLC.
9114 N.W. 106 STREET
MEDLEY, FL. 33178
TEL. (305) 885-5299 FAX (305) 885-5902

revisions:		by	description
no	date		
A	12.11.12	REV. PER PER COMMENTS	
B	04.20.15	UPDATED TO 2014 FBC	
C	12.01.15	NO CHANGE THIS SHEET	
date: 03-02-12		scale: 3/8" = 1"	
dr. by: HAMID		chk. by:	
drawing no.		W12-09	
sheet 7 of 9			



PRODUCT REVISED
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Building Code
Acceptance No. **15-0603.14**
Expiration Date **12/20/2017**
By *Manuel Mez*
Miami Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
[Signature]
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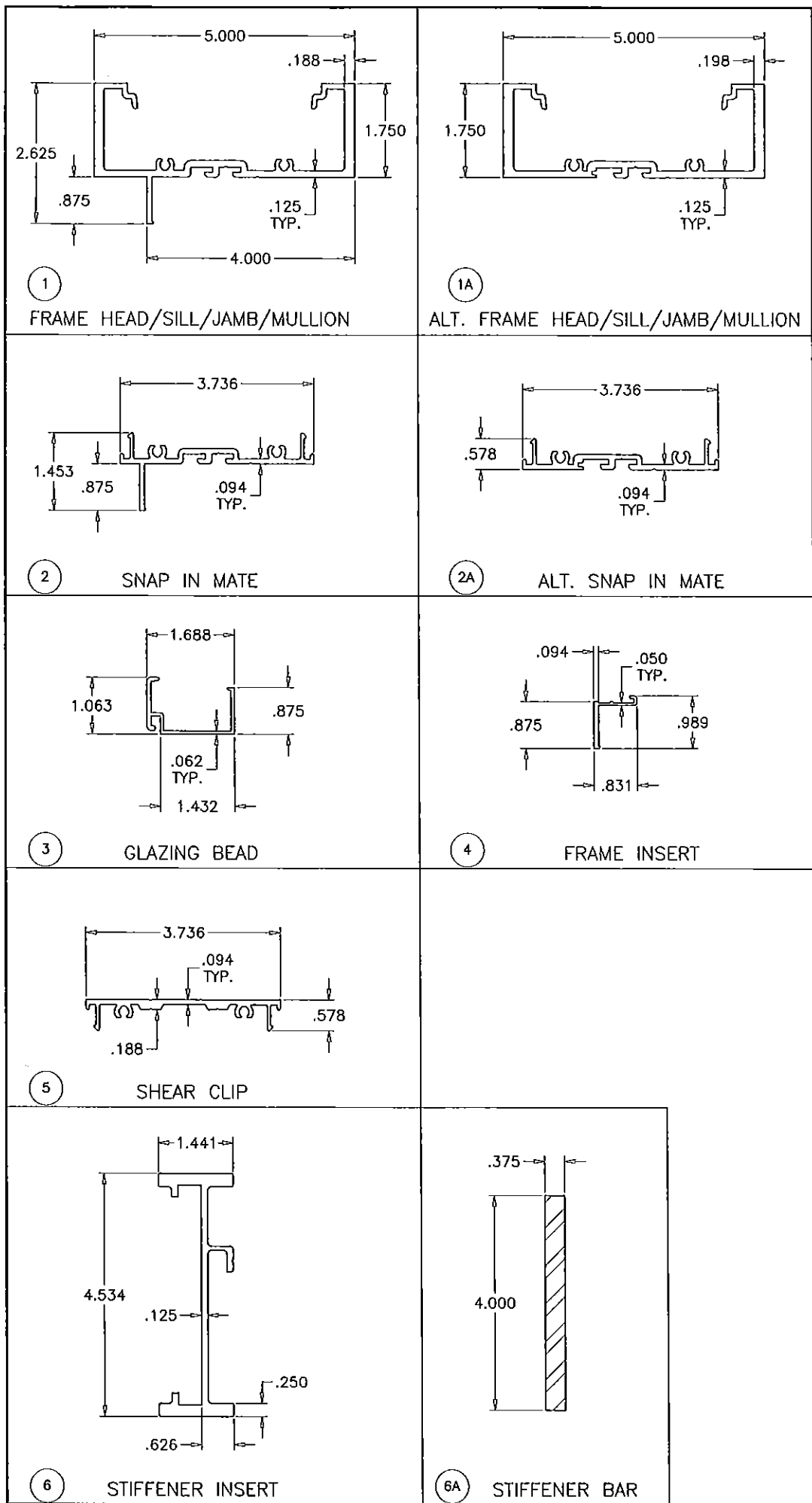
af c
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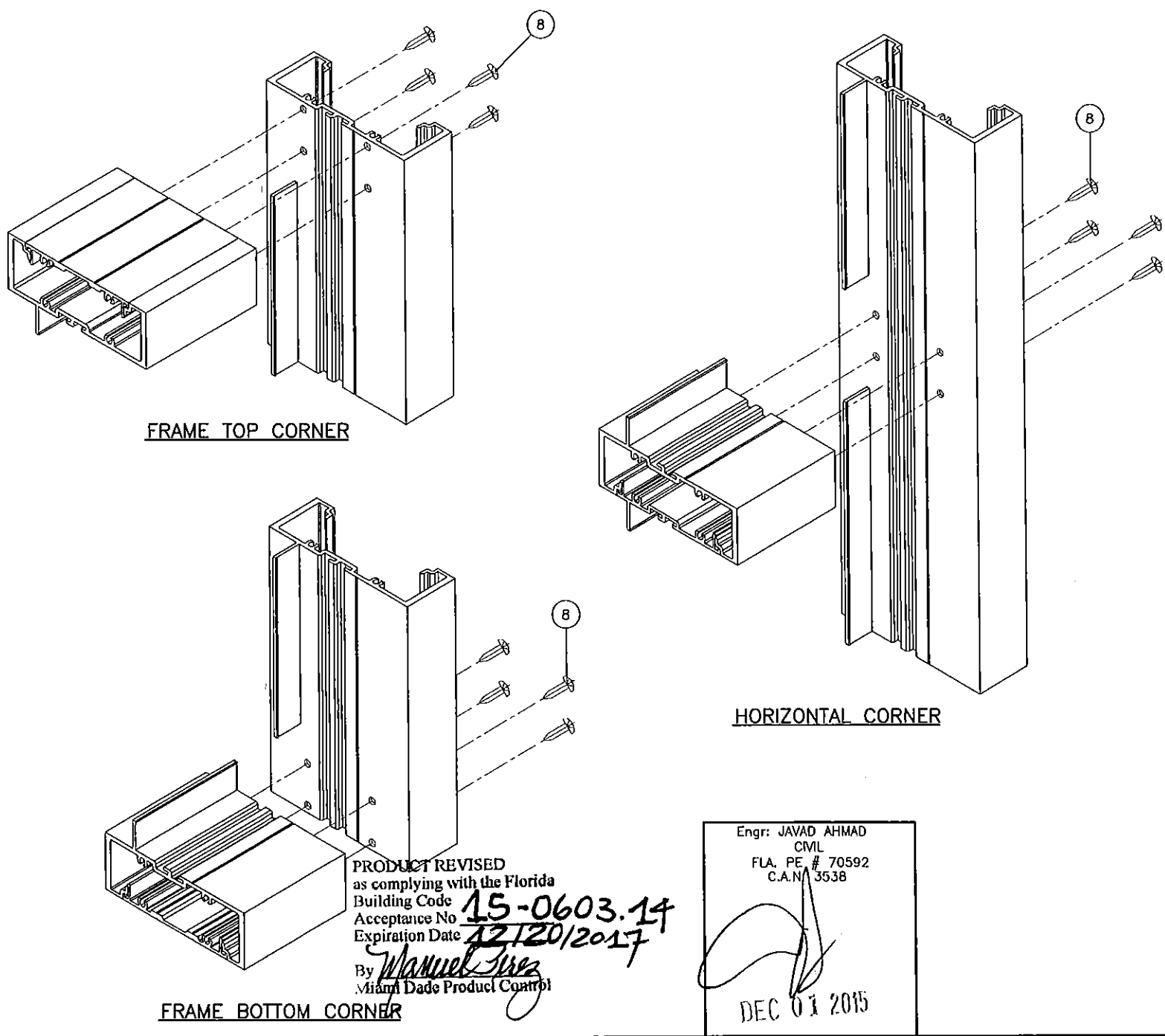
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scale: 3/8" = 1"
dr. by: HAMID
chk. by:

drawing no.
W12-09
sheet 8 of 9



ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	UW-401	AS REQD.	FRAME HEAD/SILL/JAMB/MULLION	6063-T6	-
1A	UW-407	AS REQD.	ALT. FRAME HEAD/SILL/JAMB/MULLION	6063-T6	-
2	UW-402	AS REQD.	SNAP-IN MATE	6063-T6	-
2A	UW-402	AS REQD.	ALT. SNAP-IN MATE	6063-T6	-
3	UW-404	AS REQD.	GLAZING BEAD	6063-T6	-
4	UW-408	AS REQD.	FRAME INSERT	6063-T6	-
5	UW-403	AS REQD.	SHEAR CLIP, 3-3/4" LONG AT JAMB ANCHORS	6063-T6	-
5A	UW-403	AS REQD.	SHEAR CLIP, FULL LENGTH	6063-T6	-
5B	UW-403	AS REQD.	SHEAR CLIP, LENGTH VARIES TO COVER ANCHOR SPACINGS	6063-T6	-
6	UW-408	AS REQD.	STIFFENER INSERT	6063-T6	-
6A	-	AS REQD.	STIFFENER BAR	GALV. STEEL	A36, Fu MIN. = 58 KSI
7	UW-406	AS REQD.	GLAZING GASKET	NEOPRENE	DUROMETER 55±5 SHORE A
8	#12 X 1-1/4"	4/ CORNER	FRAME ASSEMBLY SCREWS	-	PH SMS
9	-	2/ LITE	SETTING BLOCKS AT 1/4 POINTS	NEOPRENE	3/16" X 1/2" X 2" LONG
10	-	AS REQD.	GLASS SPACER	SILICONE	FRANK LOWE



PRODUCT REVISED
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Expiration Date 12/20/2017
By *Manuel Perez*
Miami Dade Product Control

Engr: JAVAD AHMAD
CML
FLA. PE # 70592
C.A.N. 3538
DEC 01 2015

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MEDLEY, FL. 33178
TEL. (305) 885-5299 FAX (305) 885-5902

revisions:	no	date	by	description
	A	12.11.12		NO CHANGE THIS SHEET
	B	04.20.15		UPDATED TO 2014 FBC
	C	12.01.15		REV. PER PER COMMENTS

date: 03-02-12
scale: 3/8" = 1"
dr. by: HAMID
chk. by:

drawing no.
W12-09
sheet 9 of 9